

WHAT IS CLAIMED IS:

1 1. A method for providing a publically routable Internet Protocol (IP) address to a
2 host computer located on a private network, comprising:

3 assigning a first publically routable IP address to a gateway coupled to
4 both a public and a private network;

5 allocating a second publically routable IP address to a host computer in
6 said private network, where said host computer is coupled to said gateway;
7 and

8 transmitting said second publically routable IP address to said host
9 computer, such that said host computer can be configured with said second
10 publically routable IP address to enable it to receive unsolicited packets from
11 said public network through said gateway.

1 2. The method of claim 1, further comprising, prior to said assigning, receiving
2 said first publically routable IP address and said second publically routable IP address
3 from an Internet Service Provider (ISP) that forms part of said public network.

1 3. The method of claim 1, further comprising, prior to said assigning,
2 allotting a first privately routable IP address to said gateway;
3 assigning a second privately routable IP address to said host computer;
4 and
5 transmitting said second privately routable IP address to said host
6 computer, such that said host computer can communicate with said gateway
7 on said private network.

1 4. The method of claim 1, further comprising, prior to said assigning, receiving an
2 instruction to assign said second publically routable IP address to said host computer.

1 5. The method of claim 1, further comprising, prior to said assigning, inquiring
2 whether said host computer would like a publically routable IP address.

1 6. The method of claim 5, wherein said inquiring comprises transmitting a Web
2 page to said host computer, where said Web page queries a user of said host

computer whether said user would like a publically routable IP address to be assigned to said host computer.

7. The method of claim 1, wherein said assigning further comprises assigning said first publically routable IP address to a Network Address Translation (NAT) service on said gateway.

8. A method for providing a publically routable Internet Protocol (IP) address to a host computer located on a private network, comprising:

receiving a first publically routable IP address and a second publically routable IP address from an Internet Service Provider (ISP);

allotting a first privately routable IP address to a gateway coupled to both a public network and a private network;

assigning a second privately routable IP address to a host computer in a private network; and

transmitting said second privately routable IP address to said host computer, such that said host computer can be configured to communicate with said gateway on said private network;

receiving an instruction to assign said second publically routable IP address to said host computer;

assigning said first publically routable IP address to a Network Address Translation (NAT) service on said gateway;

allocating said second publically routable IP address to said host computer; and

transmitting said second publically routable IP address to said host computer, such that said host computer can be configured to enable it to receive unsolicited packets from said public network through said gateway.

9. A gateway for providing a publically routable Internet Protocol (IP) address to a host computer located on a private network, comprising:

a Central Processing Unit (CPU);

communications circuitry; and

a memory, comprising:

6 an operating system;
7 communication procedures for communicating with a public and a
8 private network;
9 a control program containing:
10 instructions for assigning a first publically routable IP address to a
11 gateway coupled to both said public and said private networks;
12 instructions for allocating a second publically routable IP address
13 to a host computer in said private network; and
14 instructions for transmitting said second publically routable IP
15 address to said host computer, such that said host computer can be
16 configured with said second publically routable IP address to enable it to
17 receive unsolicited packets from said public network through said
18 gateway.

1 10. The gateway of claim 9, wherein said memory further comprises a publically
2 routable IP block that contains said first and second publically routable IP addresses.

1 11. The gateway of claim 9, wherein said memory further comprises a privately
2 routable IP block containing at least one privately routable IP address.

1 12. The gateway of claim 9, wherein said memory further comprises a Network
2 Address Translation (NAT) service.

1 13. The gateway of claim 9, wherein said memory further comprises a Dynamic
2 Host Configuration Protocol (DHCP) server.

1 14. The gateway of claim 9, wherein said memory further comprises a Web Client
2 and server, and at least one Web page for querying said host computer whether said
3 host computer would like a publically routable IP address.

1 15. The gateway of claim 9, wherein said memory further comprises instructions
2 for receiving said first publically routable IP address and said second publically
3 routable IP address from an Internet Service Provider (ISP).

1 16. The gateway of claim 9, wherein said memory further comprises:
2 instructions for allotting a first privately routable IP address to said
3 gateway;
4 instructions for assigning a second privately routable IP address to said
5 host computer; and
6 instructions for transmitting said second privately routable IP address to
7 said host computer, such that said host computer can be configured to
8 communicate with said gateway on said private network.

1 17. The gateway of claim 9, wherein said memory further comprises receiving an
2 instruction to assign said second publically routable IP address to said host computer;

1 18. A computer program product for providing a publically routable Internet
2 Protocol (IP) address to a host computer located on a private network, the computer
3 program product comprising a computer readable storage and a computer program
4 stored therein, the computer program comprising:
5 instructions for assigning a first publically routable IP address to a
6 gateway coupled to both said public and said private networks;
7 instructions for allocating a second publically routable IP address
8 to a host computer in said private network; and
9 instructions for transmitting said second publically routable IP
10 address to said host computer, such that said host computer can be
11 configured with said second publically routable IP address to enable it to
12 receive unsolicited packets from said public network through said
13 gateway.